

In the claims:

Please amend the claims as follows:

Claim 1. (Previously Amended) A method of manufacturing a semiconductor device, comprising the steps of:

forming first and second semiconductor islands on an insulating surface;

introducing ions of a p-type impurity into at least a portion of only said first semiconductor island without mass separation wherein said portion is to become a channel region of a thin film transistor; and

subjecting said first and second semiconductor islands to a thermal oxidization process to form a thermal oxide film on the first and second semiconductor islands wherein said p-type impurity is incorporated into the thermal oxide film formed on said first semiconductor island;

wherein a concentration of said p-type impurity monotonically decreases from a first portion distant from an upper surface of the first semiconductor island to a second portion close to the upper surface in a depthwise direction of the first semiconductor island.

Claim 2. (Previously Amended) A method of manufacturing a semiconductor device as claimed in claim 1,

wherein said first semiconductor island constitutes a p-channel semiconductor device;

wherein said second semiconductor island constitutes an n-channel semiconductor device; and

wherein said p-channel semiconductor device and said n-channel semiconductor device are complementarily combined with each other to form a CMOS structure.

Claims 3-5. (Withdrawn)

Claim 6. (Previously Amended) A method of manufacturing a semiconductor device as claimed in claim 1, wherein a thickness of said first semiconductor island is 100 to 1000Å.

Claim 7. (Previously Amended) A method of manufacturing a semiconductor device as claimed in claim 2, wherein a thickness of said first semiconductor island is 100 to 1000Å.

Claims 8-11. (Withdrawn).

Claim 12. (Original) The method according to claim 1 wherein said semiconductor device is a liquid crystal display device.

Claim 13. (Original) The method according to claim 1 wherein said semiconductor device is an electroluminescent display device.

Claim 14. (Original) The method according to claim 1 wherein said semiconductor device is a video camera.

Claim 15. (Original) The method according to claim 1 wherein said semiconductor device is a personal computer.

Claim 16. (Original) The method according to claim 1 wherein said semiconductor is a projection system.

Claims 17-37. (Withdrawn).

Claim 38. (Previously Added) The method according to claim 1 further comprising a step of forming a gate electrode over said first semiconductor island with said thermal oxide film interposed therebetween as a gate insulating film wherein said gate insulating film contains boron at a concentration of 1×10^{17} to $1 \times 10^{20}/\text{cm}^3$.

Claims 39-45. (Withdrawn).

Claim 46. (Previously Added) The method according to claim 1 wherein said p-type impurity is boron.

Claims 47-63. (Withdrawn).

Claim 64. (New) A method of manufacturing a semiconductor device comprising:
forming a layer of a crystalline semiconductor film on a surface of a substrate,
where the layer includes a portion to be used as a channel region of a thin film transistor;
introducing ions of a p-type impurity into the portion;
selecting a temperature corresponding to a mobility of the ions with respect to an
interface between the crystalline semiconductor film and an oxide;
subjecting the layer to a thermal oxidation process at the temperature to form a
thermal oxide on the layer into which a portion of the ions diffuse from the crystalline
semiconductor film, such that a desired concentration gradient of the ions within the crystalline
semiconductor film is obtained that provides a corresponding adjustment to a threshold voltage
of the thin film transistor.

Claim 65. (New) The method of claim 64 in which the desired concentration gradient
concentration of the ions monotonically decreases from a first portion distant from an upper
surface of the crystalline semiconductor film to a second portion close to the upper surface in a
depthwise direction of the crystalline semiconductor film.

Claim 66. (New) The method of claim 64 in which introducing ions of the p-type
impurity comprises performing ion implantation of the ions.

Claim 67. (New) The method of claim 64 in which introducing ions of the p-type
impurity comprises performing a plasma doping of the ions without mass separation.

Claim 68. (New) The method of claim 64, in which selecting the temperature comprises
selecting a temperature in the range of approximately 800°C to 1000°C.